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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Langer *et al.* Examiner: Nguyen, D.
Serial No.: 09/553,552 Group Art Unit: 1633
Filed: April 20, 2000
For: ENDOSOMOLYTIC AGENTS AND CELL DELIVERY SYSTEMS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

ESTABLISHING RIGHT OF ASSIGNEE TO TAKE ACTION
(37 CFR § 3.73(b))

The assignee of the entire right, title, and interest of inventors to the Massachusetts Institute of Technology, hereby seeks to take action in the Patent and Trademark Office in the above matter.

Ownership by the assignee is established as follows:

- X documents already recorded in the PTO on October 10, 2000,
Recl 011172 Frame 0752; or
- documents separately submitted for recordal to the PTO (a copy of these documents is attached).

STATEMENT

I, a person authorized to sign on behalf of the assignee, have reviewed the evidentiary documents referred to above and certify that, to the best of my knowledge and belief, title is mine/ours as assignees who seek to take further action.



Signature of Authorized Person

Rita M. Filipowicz

Name of Authorized Person

Patent Administrator

Title of Authorized Person

3714069v1

In re Kenneth W. DeBAUN.

Appeal No. 82-530.

United States Court of Customs
and Patent Appeals.

Aug. 27, 1982.

The Patent and Trademark Office Board of Appeals sustained rejection of claims in application for reissue of patent, and applicant appealed. The United States Court of Customs and Patent Appeals, Nies, J., held that Board erred in upholding rejection based on reference patent in view of applicant's showing that subject matter disclosed in reference patent was applicant's own invention.

Reversed.

Miller, J., concurred and filed opinion.

1. Patents ⇐140

Applicant for reissue of patent could overcome, or "antedate," patent cited as reference with proper declaration pursuant to Patent and Trademark Office Practice Rule governing oath or declaration as to facts showing completion of invention before filing date of application. Patent and Trademark Office Practice Rule 131, 35 U.S.C.A. App.

2. Patents ⇐73

Declarations of applicant, offered to overcome, or "antedate," patent cited as reference, which failed to allege facts showing necessary diligence and/or reduction to practice of invention claimed, were insufficient under Patent and Trademark Office Practice Rule governing contents of such oath or declaration. Patent and Trademark Office Practice Rule 131, 35 U.S.C.A. App.

3. Patents ⇐73

Affidavit pursuant to Patent and Trademark Office Practice Rule was not only way of overcoming rejection of patent claims due to disclosure in patent issued less than one year prior to filing for reissue of patent at issue. Patent and Trademark Office Practice Rule 132, 35 U.S.C.A. App.

4. Patents ⇐6(4)

Patent which was issued to applicant for reissue of patent under consideration and another less than one year before filing date of reissue application was available as reference only if pertinent disclosure was not sole work of applicant. Patent and Trademark Office Practice Rule 132, 35 U.S.C.A. App.

5. Patents ⇐140

It was incumbent on applicant for patent reissue to provide satisfactory evidence that relevant disclosure in reference patent, which was issued to applicant and another less than one year prior to reissue application filing, reflected his own work. Patent and Trademark Office Practice Rule 132, 35 U.S.C.A. App.

6. Patents ⇐9(5)

Completed invention requires both conception and reduction to practice to be patentable, but inventor need not be one to reduce invention to practice, so long as reduction to practice was done on his behalf.

7. Patents ⇐6(4)

Patent and Trademark Office Board of Appeals erred in upholding rejection for obviousness of claims in application for patent reissue in view of disclosure in patent issued to applicant and another less than one year prior to reissue application filing where record included applicant's unequivocal declaration that subject matter disclosed in reference patent was applicant's own invention. Patent and Trademark Office Practice Rule 132, 35 U.S.C.A. App.

Ernest M. Anderson, San Francisco, Cal.,
for appellant.

Joseph F. Nakamura, Sol., Henry W. Tarring, II, Associate Sol., Washington, D. C.,
for Patent and Trademark Office.

Before MARKEY, Chief Judge, and
RICH, BALDWIN, MILLER and NIES,
Judges.

NIES, Judge.

This appeal is from the decision of the Patent and Trademark Office (PTO) Board of Appeals (board) sustaining the rejection of claims 9 and 10 in application Serial No. 952,695 for reissue of Patent No. 3,964,519 filed November 18, 1974, for "Fluid Velocity Equalizing Apparatus." The rejection was for obviousness under 35 U.S.C. § 103¹ in view of a disclosure in a patent issued to appellant and Noll less than one year prior to November 18, 1974. The board held that the reference may be used against appellant. We reverse.

Background

The invention "relates generally to apparatus for conditioning the flow pattern [of] fluids flowing in conduits . . . particularly . . . for equalizing the velocity profile of fluid flowing in a conduit." The invention is stated to be "useful in the type of apparatus disclosed in U. S. Patent 3,842,678 issued to Kenneth W. DeBaun and Robert W. Noll on October 22, 1974." The DeBaun and Noll patent ('678 patent) filed June 1, 1973, is the sole reference forming the basis of the examiner's rejection.

The claims of the present application are directed specifically to the "equalizer ho-

neycomb section 4."² Claim 9 is representative.

9. Apparatus for equalizing the velocity of flowing fluid including duct means defining a flowing stream of fluid; at least one open-ended honeycomb equalizing section substantially coaxial with said duct means, intercepting and conducting the fluid therethrough, said honeycomb section having a plurality of parallel passages across substantially the entire duct cross-section wherein the ratio of surface area of each passage to the cross-sectional area of each passage is at least 30 and the end of the honeycomb facing the stream of fluid is curved to flatten the velocity profile of the stream. [Emphasis ours.]

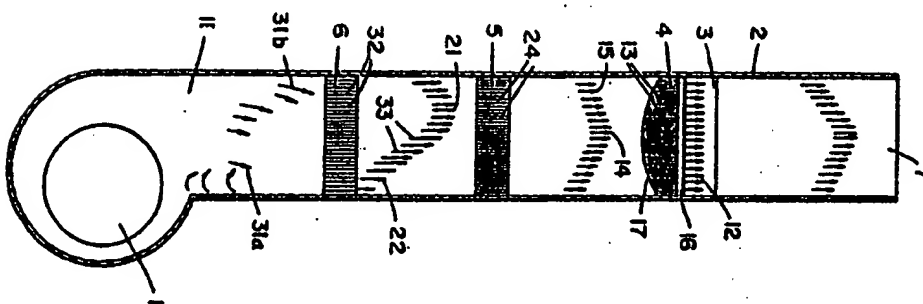
The examiner rejected the claims under 35 U.S.C. § 103 in view of the '678 patent. The '678 patent and the subject application disclose an identical passageway with an equalizer honeycomb section but the '678 patent neither describes nor claims the equalizer honeycomb section's ratio of surface area to cross-sectional area. Further, the reference claims a complete air sampling system including the passageway containing the basic equalizer honeycomb section as shown above while appellant claims

1. 35 U.S.C. § 103 provides:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject

matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The only drawing in appellant's application, shown below, is identical, except for numbering, to Fig. 6 of the '678 patent, and shows the equalizer honeycomb section 4 in an air duct 2. The duct is part of the air sampling system claimed in the '678 patent.



only the passageway containing the improved equalizer honeycomb section.

Appellant concedes that the equalizer honeycomb section of the '678 patent is "essentially constructed in accordance with applicant's invention." He further concedes, for purposes of appeal, that the relationship of surface area to cross-sectional area is "part of the teaching of [the '678 patent] or would be obvious in view thereof."

To overcome the rejection, the examiner required that appellant file an affidavit under Rule 131³ and an affidavit by Noll disclaiming inventorship of the basic equalizer honeycomb section.

No affidavit by Noll was submitted to comply with the examiner's requirement. Instead, appellant's attorney filed a declaration stating, inter alia, that "he is informed and believes" that Noll's whereabouts are not known to Air Monitor Corporation.⁴ Noll was an employee of Air Monitor Corp. at the time the application for the '678 patent was filed but has since left its employ.

Appellant also filed the following declaration:

I, KENNETH W. DEBAUN, declare as follows:

1. I am the inventor and applicant of the invention entitled "FLUID VELOCITY EQUALIZING APPARATUS", disclosed and claimed in U. S. Application Serial No. 952,695 filed October 19, 1978.

2. The invention described and claimed in said application was conceived by me prior to June 1, 1973, as evidenced

3. Rule 131, 37 CFR 1.131 provides:

(a) When any claim of an application is rejected on reference to a domestic patent which substantially shows or describes but does not claim the rejected invention, or on reference to a foreign patent or to a printed publication, and the applicant shall make oath or declaration as to facts showing a completion of the invention in this country before the filing date of the application on which the domestic patent issued, . . . or before the date of the printed publication, then the patent or publication shall not bar the grant of a patent to the applicant, unless the date of such patent or printed publication be more than one year prior to the date on

by the following facts which are of my own knowledge:

(a) Attached hereto^[5] as an exhibit is a drawing No. 73-315, dated 3-15-73, which illustrates a velocity profile development of an apparatus having open-ended honeycomb velocity equalizing sections as originally conceived by me; that in accordance with my conception, the drawing shows an open-ended honeycomb equalizing section substantially coaxial with a fluid duct, said honeycomb sections having a plurality of parallel passages across substantially the entire duct cross section, the ratio of surface area of each passage to the cross-sectional area of each passage at least 30, the end of the honeycomb facing the stream of fluid being curved to flatten the velocity profile of the stream. In addition, the length of the parallel passages, as shown, vary over the cross-sectional area of said conduit to equalize the fluid flow velocities across the cross-sectional area of the conduit;

(b) Drawing No. 73-315 was given to patent counsel for purposes of preparing a patent application on an isokinetic sampling system of which I am co-inventor with Robert W. Noll, said application having been filed on June 1, 1973, and resulted in U. S. Patent No. 3,842,678, issued October 22, 1974.

(c) Insofar as the invention of my pending application Serial No. 952,695 is suggested by drawing No. 73-315, or

which the application was filed in this country. [Emphasis ours.]

4. Appellant's application is assigned to Air Monitor Corp. of which appellant is president. Apparently, appellant's attorney has formed his "belief" on information gained solely from discussions with appellant. Appellant has failed to indicate why he did not simply include the information in his own declaration. Since we hold that Noll's disclaimer is unnecessary, we need not evaluate the weight to be given to the attorney's declaration with respect to statements more appropriately made by appellant.

5. We do not consider it necessary to include drawing No. 73-315.

by anything contained in U. S. Patent No. 3,842,678, it was originally conceived by me and described to patent counsel prior to June 1, 1973.

3. That my invention as covered by claims of U. S. Application Serial No. 952,695 was described in the specification of U. S. Patent No. 3,842,678 merely to comply with the requirements of 35 U.S.C. § 112, under the advise [sic] of applicant's attorneys.

The examiner maintained the rejection, concluding that appellant's declaration was insufficient under Rule 131 to overcome the reference.

The board sustained the § 103 rejection. While agreeing with appellant that Noll's disclaimer should not be required, the board concluded:

we do not find that the declarations are sufficient to show that the appellant is solely the inventor of the subject matter claimed by this application.

On rehearing, the board rephrased its conclusion:

We are still of the opinion that the declarations on file are not sufficient to show that the appellant is the inventor of the subject matter claimed by this application as necessary to overcome a Section 103 rejection based upon the earlier patent.

OPINION

I

[1-3] We agree with the examiner and the board that appellant could overcome, or "antedate," the '678 patent with a proper Rule 131 declaration. *In re Facius*, 56 CCPA 1348, 1355, 408 F.2d 1396, 1404, 161 USPQ 294, 300 (1969). We also agree that the declarations herein are insufficient under Rule 131 as they fail to allege facts showing the necessary diligence and/or reduction to practice of the invention now

6. Appellant has stated that he is unable to submit a declaration complying with the requirements of Rule 131.

7. Rule 132, 37 CFR 1.132 provides:

When any claim of an application is rejected on reference to a domestic patent which

claimed.⁶ See *In re Harry*, 51 CCPA 1541, 333 F.2d 920, 142 USPQ 164 (1964). However, the examiner erred in concluding that a Rule 131 affidavit is the only way of overcoming the rejection made in this case. See, e.g., *In re Land*, 54 CCPA 806, 825, 368 F.2d 866, 879-80, 151 USPQ 621, 633 n. 11 (1966).

~~In *In re Katz*, 687 F.2d 450 (Cust. & Pat.App.1982) issued concurrently, we have reaffirmed that an applicant's own work, even though publicly disclosed prior to his application, may not be used against him as a reference, absent the existence of a time bar to his application.~~

[4] Thus, the '678 patent to appellant and Noll, having issued less than one year before the filing date of appellant's original '519 patent application, is only available as a reference if the pertinent disclosure is not the sole work of appellant. As in *Katz*, supra, the specific issue raised by this appeal is an evidentiary one.

II

While the board recognized that the declarations filed herein under Rule 132⁷ must be considered, see *Facius*, 56 CCPA supra at 1352, 408 F.2d at 1402, 161 USPQ at 297 n.4, the board did not, in our view, focus on the significant question.

The board tested the declarations to determine whether they supported appellant's assertion of inventorship of the *improved* equalizer honeycomb section here claimed. That was error.

[T]he proper subject of inquiry was ... what the evidence showed as to who invented the subject matter disclosed by [the reference] which was relied on to support the rejection. [*In re Land*, 54 CCPA at 825, 368 F.2d at 879-80, 151 USPQ at 633 n.11 (emphasis in original).]

substantially shows or describes but does not claim the invention, or on reference to a foreign patent, or to a printed publication ... affidavits or declarations traversing these references ... may be received.

The only question raised by the rejection is whether appellant invented the relevant disclosure in the '678 patent.

III

The '678 patent is silent with respect to who invented the basic equalizer honeycomb section itself, and we do not presume that it is the invention of appellant and Noll jointly or of either of them.

[T]he existence of combination claims does not evidence inventorship by the patentee of the individual elements or sub-combinations thereof if the latter are not separately claimed apart from the combination. It is clear that the inventor of a combination may not have invented any element of that combination, much less each of the elements. [*In re Facius*, supra 56 CCPA at 1358, 408 F.2d at 1406, 161 USPQ at 301].

[5] As in *Katz*, supra, the question of whether appellant is the sole inventor was properly raised by the PTO, and it was incumbent on appellant to provide satisfactory evidence, in light of the total circumstances of the case, that the reference reflected his own work. *In re Facius*, supra; *In re Land*, supra.

In *Facius*, the court concluded that the affidavits filed there did not sufficiently support *Facius*'s contentions that he invented subject matter disclosed in the reference patent issued to another sole inventor, noting that the affidavits did not contain any statement that *Facius* was the inventor of such subject matter. In contrast, appellant's declaration here states that he originally "conceived" the basic equalizer honeycomb section disclosed in the '678 patent and in drawing No. 73-315.

[6] Although the law is well settled that a completed invention requires both conception and reduction to practice, there is no requirement that the inventor be the one to reduce the invention to practice so long as the reduction to practice was done on his behalf. *Litchfield v. Eigen*, 535 F.2d 72, 76, 190 USPQ 113, 116 (CCPA 1976). The filing by appellant and Noll of the application for the '678 patent was a constructive re-

duction to practice of the air sampling system including the passageway which contained the basic equalizer honeycomb section, which inures to appellant's benefit as one of the named inventors in the '678 patent. The question, then, is whether what was constructively reduced to practice was appellant's own conception. On the basis of the record here, which includes appellant's unequivocal declaration that he conceived anything in the '678 patent disclosure which suggests the invention claimed in his present application, that question has been satisfactorily answered.

[7] We conclude that the board erred in upholding the rejection based on the '678 patent in view of appellant's showing that the basic equalizer honeycomb section is appellant's own invention.

REVERSED.

MILLER, Judge, concurring.

I agree with the majority's holding that Noll's disclaimer is unnecessary; also, with its statement that we do not presume that the equalizer honeycomb section is the invention of appellant and Noll jointly or of either of them in light of the quoted language from *In re Facius*. Appellant's declaration sets forth his conception on or before March 15, 1973, well before the filing date of the DeBaun and Noll '678 patent, and other facts supported by exhibits which justify a conclusion that DeBaun was the sole inventor of the subject matter claimed in the present application. Thus, this case is readily distinguishable from the facts in *In re Katz*, 687 F.2d 450 (Cust. & Pat. App.1982) wherein I have filed my dissent. See *In re Land*, 54 CCPA 806, 823, 368 F.2d 866, 878, 151 USPQ 621, 632 (1966).



In re David Harvey KATZ.

Appeal No. 82-521.

United States Court of Customs
and Patent Appeals.

Aug. 27, 1982.

The Patent and Trademark Office Board of Appeals sustained rejection of claims in patent application, and applicant appealed. The United States Court of Customs and Patent Appeals, Nies, J., held that joint inventorship could not be inferred in light of applicant's declaration explaining that coauthors of printed publication which described his claimed invention were working under his direction and supervision and that applicant was sole inventor of subject matter disclosed in such publication.

Reversed.

Miller, J., dissented and filed opinion.

1. Patents ⇐51(1)

Patent application which was divisional application of other application was entitled to filing date of such other application.

2. Patents ⇐113(6)

Where Patent and Trademark Office Board of Appeals did not specifically reverse rejection of claims in patent application on grounds that invention was previously made by another who had not abandoned, suppressed or concealed it, the United States Court of Customs and Patent Appeals treated such rejection as having been affirmed, notwithstanding that Board specifically rejected claims on grounds that invention was described in printed publication before invention thereof by applicant. 35 U.S.C.A. § 102(a, g).

3. Patents ⇐113(6)

Where patent applicant, on appeal from decision of Patent and Trademark Office Board of Appeals sustaining rejection of claims did not contend that Board's reliance on statute allowing rejection on grounds that invention was described in

printed publication before invention thereof by applicant was new ground for rejection, United States Court of Customs and Patent Appeals would consider such statute, in addition to ground relied upon by examiner and not specifically reversed by Board. 35 U.S.C.A. § 102(a).

4. Patents ⇐51(1)

Prior conception of invention by another does not, alone, defeat one's right to patent. 35 U.S.C.A. § 102(g).

5. Patents ⇐51(2)

No barrier to patent is created by statute allowing rejection of claims on grounds that invention was previously made by another who had not abandoned, suppressed or concealed it, unless another has either actually reduced invention to practice or have constructively reduced it to practice by filing patent application. 35 U.S.C.A. § 102(g).

6. Patents ⇐51(2)

Unlike filing of patent application, publication of article is not deemed "constructive reduction to practice" of subject matter described therein; therefore, disclosure in publication does not prove that any "invention" was ever made within meaning of statute allowing rejection of claims on ground that invention was previously made by another who had not abandoned, suppressed or concealed it. 35 U.S.C.A. § 102(g).

See publication Words and Phrases for other judicial constructions and definitions.

7. Patents ⇐70

Printed publication cannot stand as patent reference under statute allowing rejection of claims on ground that invention was described in printed publication before invention thereof by applicant unless it describes work of another. 35 U.S.C.A. § 102(a).

8. Patents ⇐67

Inventor is afforded one year during which he is allowed to perfect, develop and apply for patent on his invention and publish descriptions of it if he wishes. 35 U.S.C.A. § 102(a, b).

9. Patents ⇐70

One's own work is not "prior art" under statute allowing rejection of claims on grounds that invention was described in printed publication before invention thereof by applicant, even though it has been disclosed to public in manner or form which otherwise would fall under such statute. 35 U.S.C.A. § 102(a).

See publication Words and Phrases for other judicial constructions and definitions.

10. Patents ⇐70

Disclosure to public of one's own work constitutes bar to grant of patent claiming subject matter so disclosed or subject matter obvious therefrom only when such disclosure occurred more than one year prior to date of patent application. 35 U.S.C.A. § 102(a, b).

11. Patents ⇐51(1)

One's own invention, whatever form of disclosure to the public, may not be "prior art" against oneself, absent statutory time bar. 35 U.S.C.A. § 102(a, b).

12. Patents ⇐70

Where publication of article containing description of subject matter of invention occurred less than one year before patent application, such disclosure came within scope of statute, allowing rejection of claims on ground that invention was described in printed publication before invention thereof by applicant, only if description was not of applicant's own work. 35 U.S.C.A. § 102(a, b).

13. Patents ⇐62(1)

Showing that printed publication describing invention was disclosure of patent applicant's original work, and his alone, may be made by affidavits or declarations traversing such reference pursuant to Patent and Trademark Office Practice Rule 132, 35 U.S.C.A.App.; 35 U.S.C.A. § 102(a).

14. Patents ⇐58

Authorship of printed article by itself does not raise presumption of inventorship with respect to subject matter disclosed

therein; thus, coauthors may not be presumed to be coinventors merely from fact of coauthorship. 35 U.S.C.A. § 102(a).

15. Patents ⇐70

When Patent and Trademark Office is aware of printed publication which describes subject matter of claimed invention and which is published before patent application is filed, such article may or may not raise substantial question whether applicant is inventor; content and nature of printed publication, as well as circumstances surrounding its publication, not merely its authorship, must be considered. 35 U.S.C.A. § 102(a).

16. Patents ⇐51(1)

Date of filing of patent application is only date of invention on which Patent and Trademark Office must act in absence of other proof.

17. Patents ⇐104

Inconsistency in patent application and its parent by sole inventor, which referred to previous work done by "one of the inventors" and which was represented by applicant's attorney as his error in draftsmanship, did not control over applicant's subsequent proofs regarding his status as sole inventor. 35 U.S.C.A. § 102(g).

18. Patents ⇐104

Where printed publication describing subject matter of claimed invention, which was published before patent application was filed, did not disclose anything specific about whether applicant was sole inventor or coinventor, it was incumbent on applicant to provide satisfactory showing which would lead to reasonable conclusion that he was sole inventor. 35 U.S.C.A. § 102(a).

19. Patents ⇐62(1)

Notwithstanding that submission of affidavits or declarations by other authors of prior publication describing claimed invention would have ended inquiry as to whether patent applicant was sole inventor, such were not required by statute allowing rejection of claims on ground that invention was described in printed publication before invention thereof by applicant or by Patent

and Trademark Office Practice Rule governing submission of affidavits or declarations traversing reference to printed publication; what was required was reasonable showing supporting basis for applicant's position that he was sole inventor. Patent and Trademark Office Practice Rule 132, 35 U.S.C.A.App.; 35 U.S.C.A. § 102(a).

20. Patents ⇐ 58

Joint inventorship could not be inferred where patent applicant filed declaration explaining that coauthors of printed publication which described his claimed invention eight months before effective patent application filing date were working under his direction and supervision and that applicant was sole inventor of subject matter disclosed in such publication. Patent and Trademark Office Practice Rule 132, 35 U.S.C.A.App.; 35 U.S.C.A. § 102(a).

John H. Lynn and Grant L. Hubbard, Newport Beach, Cal., for appellant.

Joseph F. Nakamura, Sol., Gerald H. Bjorge, Associate Sol., Washington, D. C., for Patent and Trademark Office.

Before MARKEY, Chief Judge, and RICH, BALDWIN, MILLER and NIES, Judges.

NIES, Judge.

[1] This appeal is from the decision of the Patent and Trademark Office (PTO) Board of Appeals (board) sustaining rejection of claims 1, 5, 17, and 18, all remaining claims in application Serial No. 937,574 for "Induction of Immunological Tolerance." The subject application is a divisional application of application Serial No. 764,586, filed February 3, 1977, and is entitled to that filing date. The claims were rejected because of a description of the subject matter of the invention in a publication dated June 1976, which appellant, however, asserts is a description of his own work. The board was unpersuaded by appellant's declarations to that effect and sustained the rejection. We reverse.

Background

In June, 1976, eight months before appellant's effective filing date, an article coauthored by Nicholas Chiorazzi, Zelig Eshhar

and appellant was published in the *Proceedings of the National Academy of Science*, U.S.A., Vol. 73, No. 6, pp. 2091-95. There is no dispute that the article (Chiorazzi et al.) fully describes the claimed invention.

Along with his divisional application, appellant filed a declaration in which he declared that:

He is the sole inventor of the subject matter described and claimed in the United States Patent Application Serial No. 764,586, filed February 3, 1977, entitled, *INDUCTION OF IMMUNOLOGICAL TOLERANCE*, which subject matter is disclosed and claimed in part in the divisional application with which this declaration is submitted.

He is co-author of a report in the proceedings of the National Academy of Science, U.S.A., Volume 73, No. 6, Pages 2091-2095, June, 1976, communicated to the National Academy of Science by Albert H. Coons, a member of said Academy, on March 8, 1976, *that he is the sole inventor of the subject matter which is disclosed in said publication in the proceedings of the National Academy of Science and disclosed and claimed in the application submitted herewith.* [Emphasis ours.]

The other authors of the publication, Nicholas Chiorazzi and Zelig Eshhar were students working under the direction and supervision of the inventor, Dr. David H. Katz, and while co-authoring the publication, are not co-inventors of the subject matter described therein.

The Examiner's Rejections

In his first Official Action, the examiner stated:

Claims 1, 5, 17 and 18 are rejected under 35 USC 102(g) as anticipated by Chiorazzi et al. . . . Applicant's declaration . . . is entirely ineffective in overcoming the rejection of this nature and is considered to be nothing more than the self-serving statement.

In his Final Official Action, the examiner adhered to the § 102(g) rejection adding: [T]here is no evidence of record which makes it clear that appellant is the sole

inventor of the *claimed* invention
Where a reference is from a collection of authors, it must be assumed that all authors contributed equally even though it is recognized that sometimes individuals involved only with assay and testing features of the invention and . . . not involved in the conceptual [sic] aspect of the research are included as an author to a particular reference. There is not sufficient evidence of record to show that applicant is the sole inventor of the claimed invention.

* * * * *
... The publication date as well as communication date of the reference, both dates being prior to applicant's filing date, [are] clear evidence to [sic] prior invention. [Emphasis in original].

To overcome the rejection, the examiner required that appellant either (1) amend his application to include the other authors as coinventors, or (2) file affidavits from the other authors "disclaiming the invention claimed." Appellant chose to appeal rather than comply with either requirement.

The Board's Affirmance

While the board sustained the examiner's rejection, it did so on the following ground:

The Chiorazzi et al. article, as pointed out by the examiner and as acknowledged by appellant, fully describes the presently claimed therapeutic immuno-suppressive agent and the method of preparing same. In view of the fact that the article was published some eight months prior to the effective filing date of the present application *and since the authors of the article are legally another within the meaning of Section 102(a)*, we are satisfied that the examiner has clearly established a prima facie case of lack of novelty of the presently claimed therapeutic agent and method.

Appellant, who is a coauthor of the Chiorazzi article, has stated under oath that he is the sole inventor of the subject matter herein claimed and described in the article, and that the other authors, namely, Chiorazzi and Eshhar, are not coinventors but were simply students working under his direction and supervi-

sion. In appellant's view, this declaration constitutes legally acceptable evidence and, in the absence of evidence to the contrary, is sufficient to establish that he is the sole inventor of the subject matter in issue.

However, we do not find this declaration, standing alone, sufficient to establish that Katz is the sole inventor and thus remove the Chiorazzi article as a reference against the presently claimed subject matter. Although appellant may be of the opinion that he is the sole inventor, such a view may not be shared by the coauthors of this article. Coauthors Chiorazzi and Eshhar may, in fact, be of the opinion that they are, at the very least, coinventors of the subject matter described in the article and claimed herein. *Even though authorship may not conclusively establish inventorship, it is reasonable to infer that such a relationship exists.* Appellant's unsupported statement, even though under oath, does not convince us otherwise. In our view, disclaiming affidavits or declarations by the other authors are required in order to support appellant's contention that he is the sole inventor of the subject matter described in the Chiorazzi article and claimed here. [Emphasis ours.]

The board adhered to its position on rehearing.

OPINION

[2, 3] Because the board did not specifically reverse the § 102(g) rejection, we treat it as having been affirmed. 37 CFR 1.196(a). Further, since appellant does not contend that the board's reliance on § 102(a) is a new ground for rejection, we will also consider that section. 37 CFR 1.196(b). Appellant does suggest that the board apparently confused § 102(e) with § 102(a) since § 102(a) makes no reference to "another" in the context of authorship of a publication. However, we disagree that the board was "confused" in this respect for reasons which will become apparent and, accordingly, do not find it necessary to consider § 102(e) separately.

35 U.S.C. § 102(g)

[4, 5] Section 102(g) reads:

A person shall be entitled to a patent unless—

* * * * *

(g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

This section of the statute embodies the principle that to be entitled to a patent one must be the first to have made the invention. However, prior conception of the invention by another does not defeat one's right. No possible barrier is created by § 102(g) unless another has either actually reduced the invention to practice or has constructively reduced it to practice by filing a patent application.

[6] We specifically reject the examiner's position that the publication of the subject article provides even a tenuous ground for rejection under 35 U.S.C. § 102(g). Unlike the filing of a patent application, the publication of an article is not deemed a constructive reduction to practice of the subject matter described therein. *In re Schlittler*, 48 CCPA 986, 989, 234 F.2d 882, 884, 110 USPQ 304, 305-06 (1956). Therefore, disclosure in a publication does not prove that any "invention" within the meaning of 102(g) has ever been made by anyone. The examiner's ground for rejection must, therefore, fail.

35 U.S.C. § 102(a)

Section 102(a) reads:

1. 35 U.S.C. § 102(b) provides:

A person shall be entitled to a patent unless—

* * * * *

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date

A person shall be entitled to a patent unless—

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent.

[7, 8] It may not be readily apparent from the statutory language that a printed publication cannot stand as a reference under § 102(a) unless it is describing the work of another. A literal reading might appear to make a prior patent or printed publication "prior art" even though the disclosure is that of the applicant's own work. However, such an interpretation of this section of the statute would negate the one year period afforded under § 102(b)¹ during which an inventor is allowed to perfect, develop and apply for a patent on his invention and publish descriptions of it if he wishes. *Illinois Tool v. Solo Cup Co.*, 461 F.2d 265, 172 USPQ 385 (CA 7), cert. denied, 407 U.S. 916, 92 S.Ct. 2441, 32 L.Ed.2d 691 (1972).

[9-11] Thus, one's own work is not prior art under § 102(a) even though it has been disclosed to the public in a manner or form which otherwise would fall under § 102(a). Disclosure to the public of one's own work constitutes a bar to the grant of a patent claiming the subject matter so disclosed (or subject matter obvious therefrom) only when the disclosure occurred more than one year prior to the date of the application, that is, when the disclosure creates a one-year time bar, frequently termed a "statutory bar," to the application under § 102(b). As stated by this court in *In re Facius*, 56 CCPA 1348, 1358, 408 F.2d 1396, 1406, 161 USPQ 294, 302 (1969), "But certainly one's own invention, whatever the form of disclosure to the public, may not be prior art against oneself, *absent a statutory bar.*" [Emphasis in original.]²

of the application for patent in the United States. [Emphasis added.]

2. Since any valid rejection is necessarily a "statutory bar," in a generic sense, the expression "statutory bar" must be understood here as meaning "statutory time bar" under 35 U.S.C. § 102(b).

[12] Since the publication in this case occurred less than one year before appellant's application, the disclosure comes within the scope of § 102(a) only if the description is not of appellant's own work.

[13] The specific question present in this appeal is essentially an evidentiary one, namely, the sufficiency of applicant's showing to establish that the subject disclosure was his original work, and his alone.³ We conclude that appellant's declaration is sufficient in this case to overcome the rejection.

[14-16] As an initial matter, we hold that authorship of an article by itself does not raise a *presumption* of inventorship with respect to the subject matter disclosed in the article. Thus, co-authors may not be *presumed* to be coinventors merely from the fact of co-authorship. On the other hand, when the PTO is aware of a printed publication, which describes the subject matter of the claimed invention and is published before an application is filed (the only date of invention on which it must act in the absence of other proof), the article may or may not raise a substantial question whether the applicant is the inventor. For example, if the author (whether he is the applicant or not) specifically states that he is describing the work of the applicant, no question at all is raised. The content and nature of the printed publication, as well as the circumstances surrounding its publication, not merely its authorship, must be considered.

[17, 18] What we have in this case is ambiguity created by the printed publication.⁴ The article does not tell us anything specific about inventorship, and appellant is only one of three authors who are reporting on scientific work in which they have all been engaged in some capacity at the Harvard Medical School. It was incumbent,

therefore, on appellant to provide a satisfactory showing which would lead to a reasonable conclusion that he is the sole inventor.

[19] The board and the examiner held that "disclaiming affidavits or declarations by the other authors are required to support appellant's position that he is, in fact, the sole inventor of the subject matter described in the article and claimed herein." This was clear error. Submission of such affidavits or declarations would have ended the inquiry, but we do not agree that they are required by the statute or Rule 132. What is required is a reasonable showing supporting the basis for the applicant's position.

[20] In this case, appellant reiterated in his declaration that he is the sole inventor of the subject matter described and claimed in his application and also that disclosed in the publication of proceedings of the National Academy of Science. We do not view this averment as a mere pro forma restatement of the oath in his application.

In the declaration, appellant provides the explanation that the co-authors of the publication, Chiorazzi and Eshhar, "were students working under the direction and supervision of the inventor, Dr. David H. Katz." This statement is of significance since it provides a clear alternative conclusion to the board's inference that their names were on the article because they were coinventors. As acknowledged by the examiner, the names of individuals may be given as authors of a scientific report who are "involved only with assay and testing features of the invention." Appellant's explanation is, thus, consistent not only with the content of the article but with the nature of the publication. On the record here, the board should not have engaged in further speculation as to whether appellant's view was shared by his co-authors but rather should have accepted that Chiorazzi and

3. Such showing can be made under Rule 132, 37 CFR 1.132, which provides:

When any claim of an application is rejected on reference to a . . . printed publication . . . affidavits or declarations traversing [the reference] . . . may be received.

4. The solicitor notes that in the application, there is an inconsistency in that the subject application and its parent by a sole inventor refer to previous work done by "one of the inventors." While adding to the ambiguity, this statement, which appellant's attorney represents was his error in draftsmanship, does not control over appellant's subsequent proofs.

Eshhar were acting in the capacity indicated, that is, students working *under the direction and supervision of appellant*. From such a relationship, joint inventorship cannot be inferred in the face of sworn statements to the contrary.

Thus, we conclude that in view of the totality of circumstances, appellant has made a sufficient showing that the cited publication discloses his invention. Accordingly, we reverse the decision of the board.

REVERSED.

MILLER, Judge, dissenting.

The board correctly held that it is reasonable to infer coinventorship from coauthorship. This inference is sufficient to justify a determination by the PTO that the reference printed publication ("*Chiorazzi et al.*") in question is prior art under 35 U.S.C. § 102 as applied against an application for patent filed by one of the coauthors.¹ *In re Facius*, 56 CCPA 1348, 408 F.2d 1396, 161 USPQ 294 (1969); *In re Mathews*, 56 CCPA 1033, 408 F.2d 1393, 161 USPQ 276 (1969); *In re Land*, 54 CCPA 806, 368 F.2d 866, 151 USPQ 621 (1966). Although all of the latter opinions by this court have involved prior patents issued to different inventive entities, the board has established a line of cases involving only printed publications. *In re Magner*, 133 USPQ 404 (1961); *In re Seaborg*, 131 USPQ 202 (1960); *In re Hirschler*, 110 USPQ 384 (1952); *In re Layne*, 63 USPQ 17 (1943). Such cases are analogous to the instant appeal, and, contrary to appellant's arguments, are consistent.

In *Layne*, the board agreed with the examiner that an affidavit by the applicant, stating that an article published by another was made with the applicant's consent, was

1. As argued by the Solicitor, this printed publication is also evidence that "the invention was known or used by others in this country . . . or described in a printed publication in this . . . country, before the invention thereof by applicant" under 35 U.S.C. § 102(a) and, as held by the examiner, is evidence that "before the applicant's invention thereof the invention was made in this country by another" under 35 U.S.C. § 102(g). The "others" in 102(a), "not himself" in 102(f), and "another" in 102(g) are terms that serve to distinguish between differ-

not sufficient to overcome the examiner's rejection. The board stated:

[I]t is stated in the brief that counsel can obtain an affidavit of the writer of the article in the publication that he obtained his information from the deponent. It is our view that this affidavit of the writer of the article, H. Lee Flood, should be furnished to afford complete and satisfactory proof of the identity of the article disclosed in the publication.

. . . [U]ntil the affidavit referred to is furnished, the rejection on the publication in the *Petroleum Engineer* appears proper. For this reason, the rejection is affirmed. It is recommended, however that if a proper affidavit of H. Lee Flood is promptly submitted, the claims be allowed.

63 USPQ at 19. *Layne* differs from the present case in that the inventor in *Layne* was not named as a coauthor; here, Katz was one of the named coauthors.

When presented with an examiner's rejection utilizing a publication coauthored by the applicant and his laboratory assistant, the board in *Hirschler* refused to sustain the rejection in view of the submission of an affidavit disclaiming inventorship which was executed by the lab assistant. The board said:

[A]n affidavit which points out that affiant took no part in writing the article and was not the inventor of the subject matter described in the article, but was merely listed as coauthor of the article in order to receive credit for having collaborated on the research program under the directions of present appellant, is properly acceptable and . . . the article may be considered the sole work of present appel-

ent inventive entities. Contrary to the majority opinion's view of section 102(g), the Katz et al. article indicates that the invention was actually reduced to practice; appellant did not contest the examiner's rejection on this basis. In this case, Katz, the applicant, is one inventive entity and his effective date of invention, as the record now stands, is his application filing date. Collectively, Katz, Chiorazzi, and Eshhar comprise a second inventive entity. See Chisum on Patents § 3.08[2](a).

lant. Since the article is not a statutory bar, it is not effective as a reference. 110 USPQ at 387. Here, of course, there are no disclaiming affidavits filed by the co-authors and alleged noninventors.

Appellant quotes the following statement of the board in *Seaborg* explaining that a Rule 131 affidavit was unnecessary:

The issue is not one of priority but attribution of inventorship, the examiner evidently having in mind the possibility that Wahl might be a joint inventor. But we would emphasize that the bare fact that Wahl is the literary co-author is not evidence of joint inventorship.

131 USPQ at 203. This statement is taken out of context, the board actually concluding:

On the question of originality any evidence convincing to the Office may be accepted. The evidence here is in the form of an affidavit by joint author Wahl stating that he is not the inventor of the subject matter claimed herein. In absence of any adversity of interest there seems to be little basis for challenging this affidavit. In fact, the examiner states on page 4 of his answer that he "has no doubt that Seaborg is the sole inventor of the subject matter claimed."

Under these circumstances we see no valid basis for maintaining the rejection on the Seaborg and Wahl article.

131 USPQ at 203. As is apparent, a disclaiming affidavit was filed by the coauthor and noninventor, which clearly distinguishes *Seaborg* from the present case. Also, the board justified its position, at least in part, on the basis that the affiant had no "adversity of interest."

In *Magner*, three of four applicants had published an article disclosing their invention less than a year prior to the application's filing date. The three coauthors and coinventors filed an affidavit declaring that the fourth applicant was also a coinventor, viz., that he "and themselves mutually participated in the conception, research and reduction to practice of the invention claimed . . ." and that the article "was prepared from the research records of them-

selves and the fourth co-inventor." 133 USPQ at 405. The examiner refused to accept this affidavit because an explanatory affidavit by the fourth co-inventor had not been presented. The board refused to sustain the examiner's rejection, stating:

The article is by three of the four joint inventors; we see no necessity for an affidavit under Rule 131 as no question of priority is involved. The question is as to attribution of inventorship—an explanation of the relation of the publication by three of the joint inventors to the application of all four of them. We think that the affidavit satisfies this requirement. On the question of originality any competent evidence convincing to the Office may be accepted. *There is no reason to doubt the statement of the three joint inventors as to the participation of the fourth inventor as this statement is of no benefit to them.* [Emphasis supplied.]

Id. This is unlike the present case, where the appellant's affidavit is favorable to his own interest and adverse to the interests of coauthors Chiorazzi and Eshhar.

Appellant argues that the board's reasoning in *In re McGuckian*, 202 USPQ 398 (1975), is somehow analogous and supports his position. *McGuckian*, however, involved the use of a typical 37 CFR 1.131 affidavit filed to overcome the examiner's application of a United States Patent as a reference under 35 U.S.C. § 102(e). The examiner determined that the Rule 131 showing, which included three declarations, two by applicant and one by his attorney, and fifteen exhibits, was not sufficient to meet the requirements of the rule. The board held that the Rule 131 showing was sufficient and indicated that the examiner was required to accept as true the applicant's sworn statements that "he is the inventor"; that 'he conceived and reduced to practice the invention'; and that the work evidenced by Exhibits 1 through 15 'was made through his efforts and others at his request on his behalf.'" In this context, as quoted by Katz, the board said:

It is neither the Examiner's function nor our function under such circumstances to

divine the role if any played by someone who is a complete stranger to the proceeding. It is only in some inter partes proceeding, totally lacking here, where all interested parties are represented and the fundamental safeguards of direct examination and cross-examination are possible, that the question of inventorship and dates of invention can be explored in the manner attempted by the Examiner here.

202 USPQ at 399. However, *McGuckian* offers no support to appellant. That case was concerned only with the adequacy of the applicant's Rule 131 showing; whereas, appellant here has not attempted to comply with the requirements of Rule 131.

Essentially, appellant argues that this court either should hold that coauthorship is not evidence of, or a basis for inferring, coinventorship or should accept without question an affidavit by an applicant which simply states that he is the sole inventor. To the contrary, I would hold that coauthorship is evidence of coinventorship and creates an inference thereof which is sufficient to establish a prima facie case under either 35 U.S.C. § 102(a), (f), or (g) that the Chiorazzi et al. article is prior art;² further, that appellant's declaration does not rebut the prima facie case.³

As to the showing that would be sufficient to overcome the government's prima facie case, it is to be noted that inventorship is a matter of law which depends upon factual matters underlying the development of the invention, including the contribution by all parties involved with the claimed invention. See *Linkow v. Linkow*, 517 F.2d 1370, 186 USPQ 223 (CCPA 1975); *Hedgewick v. Akers*, 497 F.2d 905, 182 USPQ 167 (CCPA 1974). As related earlier, the board's decision to accept or reject affidavits affecting a nonaffiant's rights in an invention has been predicated upon whether the affiant's statements are adverse to the

nonaffiant's interest. Because the affiant, Katz, seeks to adversely affect the interests of the coauthors Chiorazzi and Eshhar, the PTO has refused to accept his affidavit as determinative, leaving him a choice of submitting affidavits by Chiorazzi and Eshhar disclaiming any interest in the invention or making a showing of facts in existence prior to the date of publication of the Chiorazzi et al. article sufficient to prove that inventorship of the claimed invention lies solely with Katz.⁴

The majority accepts the Katz declaration, which simply concludes that Katz is the sole inventor and that his coauthors were students in his employ. Katz has not provided either a recitation of facts to support these conclusions, viz., type of supervision in the lab, circumstances resulting in his conception, instructions to his coauthors, participation and performance by his coauthors, etc. or a recitation of facts from which the PTO could conclude that his coauthors played no role in the conception of the invention. Joint publication of this article in the names of Katz, Chiorazzi, and Eshhar, without explanation, places a cloud upon the sole application of Katz and requires that Katz affirmatively clear the air. This he has not done.

In view of the PTO's limited resources for processing in excess of 100,000 patent applications a year, it is disappointing that a majority of this court cannot see its way to extend a helping hand to the effort of a vital administrative agency to protect the integrity of the patent system, with minimal inconvenience to an applicant.



2. See note 1, *supra*.

3. If Chiorazzi and Eshhar were merely involved in assembling data, conducting experiments, testing the invention, or reporting the inventor's activities, it is not unreasonable to require that this limited role be affirmed by them or Katz. After all, the resources of the PTO are

limited and such information is readily available to appellant.

4. See U. S. Patent & Trademark Office, Manual of Patent Examining Procedure § 715.01(c) (4th Ed. Rev. 1980).